

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/722,929
Filing Date	11/26/2003
First Named Inventor	Rynd
Art Unit	1791
Examiner Name	Wollschlager
Attorney Docket Number	25226A

Sheet 1 of 6

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		2,365,086	12/12/1944	Kamowski	
		3,574,644	4/13/1971	Olstowski et al.	
		4,301,040	11/17/1981	Berbeco	
		4,385,156	5/1/1983	Ingram et al.	
		4,996,109	2/26/1991	Krieg et al.	
		5,130,342	7/14/1992	McAllister et al.	
		5,550,170	8/1/1996	Trager et al.	
		5,679,718	10/21/1997	Suh et al.	
		5,719,199	2/17/1998	Wallace et al.	
		5,779,775	7/14/1998	Kuwabara	
		5,853,752	12/29/1998	Unger et al.	
		5,912,279	6/15/1999	Hammel et al.	
		5,993,707	11/20/1999	Chaudhary et al.	
		6,048,909	4/11/2000	Chaudhary et al.	
		6,093,752	7/25/2000	Park et al.	
		6,130,265	10/10/2000	Glueck et al.	

FOREIGN PATENT DOCUMENTS

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		Country Codes - Number 4 - Kind Codes (if known)				
		DE 199 07 663	8/24/2000	BASF		
		DE 199 10 257	9/21/2000	Schwenk		
		DE 2004 019708	11/17/2005	Stork et al.		
		EP 0 729 999	4/9/1996	Okisaki et al.		
		EP 0 863 175	9/9/1998	Hahn et al.		
		EP 01214372	12/28/2005	Duffy		

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		Number-Kind Code ^{2,3} (if known)			
		6,133,333	10/17/2000	Chaudhary et al.	
		6,174,471	1/16/2001	Park et al.	
		6,197,233	3/6/2001	Mason et al.	
		6,213,540	4/10/2001	Tusim et al.	
		6,231,795	5/15/2001	Chaudhary et al.	
		6,242,540	6/1/2001	Crevecoeur et al.	
		6,340,713	1/22/2002	Gluck et al.	
		6,350,789	2/26/2002	Miller et al.	
		6,355,341	3/12/2002	Chaudhary et al.	
		6,362,242	3/26/2002	Gluck et al.	
		6,387,968	5/14/2002	Gluck et al.	
		6,417,240	7/9/2002	Park	
		6,420,442	7/16/2002	Dietzen et al.	
		6,521,672	2/18/2003	Gluck et al.	
		2001/0036970	11/1/2001	Park	
		2002/0041955	4/11/2002	Watanabe et al.	

FOREIGN PATENT DOCUMENTS						
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		Country Codes - Number 4 - Kind Codes (if known)				
		EP 0515125	11/25/1992	York		
		EP 0675918	9/27/2000	Reedy et al.		
		EP 0921148	2/23/2000	Eschenlauer et al.		
		EP 0922554	6/25/2003	Eschenlauer et al.		
		EP 1 205 437	5/15/2002	Osawa		
		EP 1 209 189	5/29/2002	Kresta		

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		Number-Kind Code ² (if known)			
		2002/0086908	7/1/2002	Chou et al.	
		2002/0121717	9/5/2002	Chaudhary et al.	
		2002/0155270	10/24/2002	Chaudhary et al.	
		2002/0168509	11/14/2002	De Simone et al.	
		2003/0082343	5/1/2003	Brucker	
		2003/0162852	8/28/2003	Chaudhary et al.	
		2003/0175497	9/18/2003	Kobe et al.	
		2004/0167240	8/26/2004	Burgun et al.	
		2004/0209782	10/21/2004	Zhang et al.	
		2005/0048276	3/3/2005	Wilson	
		2005/0112356	5/26/2005	Rynd et al.	
		2006/0148916	7/6/2006	Loh et al.	

FOREIGN PATENT DOCUMENTS

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		Country Codes-Number 4-Kind Codes (if known)				
		EP 620 246	10/19/1994	Algostat		
		EP 97/02457	10/10/2000	Glueck et al.		
		EP 99/04867	5/7/2002	Glueck et al.		
		WO 1999/047592	9/23/1999	Park et al.		
		WO 2000/034363	6/15/2000	Chaudhary et al.		
		WO 2000/034365	6/15/2000	Chaudhary et al.		

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U. S. PATENT DOCUMENTS

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		Country Codes -Number 4 -Kind Codes (if known)				
		WO 2004/065461	8/5/2004	Lee et al.		
		WO 2004/067577	8/12/2004	McDonald et al.		
		WO 2004/078785	9/1/2004	Moad et al.		
		WO 2005/054349	6/16/2005	Rynd et al.		
		WO 2006/009945	1/26/2006	Hagerty et al.		
		WO 2006/009980	1/26/2006	Lin et al.		

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		WO 2006/073712	7/13/2006	Loh et al.		
		WO 2008/005022	1/10/2008	Loh et al.		
		WO 97/31053	8/28/1997	Karande et al.		
		WO 98/03581	1/29/1998	Creazzo et al.		
		WO 99/31170	6/24/1999	Chaudhary et al.		

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		International Search Report PCT/US2005/045291 dated 5/12/2006	
		International Search Report PCT/US2006/035056 dated 2/20/2008	
		International Search Report PCT/US2008/058543 dated 7/23/2008	
		Zhang, et al., Preparation and Combustion Properties of Flame Retardant SBA Copolymer/Graphite Oxide Nanocomposites, Macromol, Mater Eng., March 2004, 289, 355-59.	
		Cassegneau, et al., Preparation and Characterization of Ultrathin Films Layer-by-Layer Self Assembled from graphite Oxide Nanoplatelets and Polymer, Langmuir, 2000, 16, 7318-24.	
		Guo-Hua Chen, Da-Jun Wu, Wen-Gui Weng and Wen-Li Yan; Dispersion of Graphite Nanosheets in a Polymer Matrix and the Conducting Property of the Nanocomposites; Polymer Engineering and Science, Dec. 2001, Vol 41, No. 12; pp 2148-54.	
		Pan, Y.X., Yu, Z.Z., Ou, Y.C., Hu, G.H.; A new process of fabricating electrically conducting nylon 6/graphite nanocomposites via intercalation polymerization, Journal of Polymer Science: Part B: Polymer Physics, 38, 1626-1633 (2000).	
		Xiao, P., Xiao, M., Gong, K.; Preparation of exfoliated graphite/polystyrene composite by polymerization-filling technique, Polymer, 42, 4813-4816 (2001).	
		Chen, G.H., Wu, D.J., Weng, W.G., Yan, W.L., Preparation of polymer/graphite conducting nanocomposite by intercalation polymerization, Journal of Applied Polymer Science, 82, 2506-2513 (2001).	
		Uhl, F.M. and Wilkie, C.A., Polystyrene/graphite nanocomposites: effect on thermal stability, Polymer Degradation and Stability, 76, 111-122 (2002).	
		Modesti, M., Lorenzetti, A., Simioni, F., Camino, G., Expandable graphite as an intumescent flame retardant in polyisocyanurate-polyurethane forms, Polymer Degradation and Stability, 77, 195-202 (2002).	
		Drzal, L.T. and Fukushima, H., Graphite nanoplatelets as reinforcements for polymers, Polymers Preprints (American Chemical Society, Division of Polymer Chemistry) 42 (2), 42-43 (2001).	

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